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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,101	02/23/2001	Isabelle Rollat-Corvol	05725.0807	4969
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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413				
			EXAMINER WANG, SHENGJUN	
			ART UNIT 1617	PAPER NUMBER

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,101

Applicant(s)

ROLLAT-CORVOL ET AL.

Examiner

Shengjun Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-106 is/are pending in the application.
- 4a) Of the above claim(s) 59,61-68,70-77,80-82 and 85-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-58,60, 69, 78, 79, 83, 84, 88-106 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 24, 2006 has been entered.

Double Patenting Rejections

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 38-58, 60, 69, 78, 79, 83, 84, 88-106 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-41 of U.S. Patent No. 6,346,234 in view of Lee. '234 claims a remodelable hair styling composition comprising at least the tacky polymer herein. See the claims. The claims do not expressly recite the second polymer herein, the fixing polymer.

However, Lee teaches acrylate-based copolymers to be used advantageously as water-soluble amphoteric polymer, such as octylacrylamide/acrylates/butylaminoethyl methacrylate

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copolymer in hair treating composition (see page 3, lines 30-37). The water soluble amphoteric polymer provides a very substantial hold, and provide aiding in removing the water-insoluble resin in a hair composition from the hair upon shampooing (pages 3, lines 5-14).

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to employ octylacrylamide/acrylates/butylaminoethyl methacrylate copolymer as additional polymer known to be useful in hair treating composition.

A person of ordinary skill in the art would have been motivated to employ octylacrylamide/acrylates/butylaminoethyl methacrylate copolymer as additional polymer known to be useful in hair treating composition because such polymer provide additional benefit to the hair composition.

Claim Rejections 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 38-43, 45-50, 69, 78,79,83, 84, 88-106 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are directed to composition comprising polymers, which are solely defined by physical properties “tacky” ; T_g , F_{max} , or $Es_{(M/V)}$. etc. However, the specification provides no written description as to what the structural

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characteristics of a polymer would be required to meet all the functional limitations herein. In view of the fact of lacking working examples, guidance, and direction, one of ordinary skill in the art would have reasonable doubt that applicants, at the time the application was filed, had actual possession of such polymers other than the particular commercially available polymers herein employed.

Claim Rejections 35 U.S.C. 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 38-58, 60, 69, 78,79,83, 84, 88-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (EP 0551,749, of record), in view of Miller et al. (WO 95/18191, IDS).

Lee teaches a hair treatment composition comprising a water-insoluble, water-dispersible polymeric resin and a water-soluble amphoteric polymer (see abstract, page 3, lines 6-50; and pages 7-8, claims 1-8). Most preferred water-insoluble polymeric resin includes polyesters functionalized with a sulpho group such as Eastman AQ polymers (see pages 3, lines 15-20). Acrylate-based copolymers to be used advantageously as water-soluble amphoteric polymer of the composition, such as octylacrylamide/acrylates/butylaminoethyl methacrylate copolymer in hair treating composition (see page 3, lines 30-37). The water soluble amphoteric polymer provides a very substantial hold, and provide aiding in removing the water-insoluble resin in a hair composition from the hair upon shampooing (pages 3, lines 5-14).

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6. Lee does not teach expressly the employment of branched sulfonic polyester herein with Tg less than 20 °C.

7. However, Miller et al. teaches the improved branched sulfonic polyester with lowed Tg. The low Tg provide advantage that the composition will not be brittle at low temperature, thus maintain its property. (see particularly, pages 16-18).

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to modify Lee's composition by using the branched sulfonic polyester as the water-dispersible resin.

A person of ordinary skill in the art would have been motivated to modify Lee's composition by using the branched sulfonic polyester as the water-dispersible resin because the branched sulfonic polyester will not become brittle or lost its property at low temperature.

Response to the Arguments

Applicants' remarks submitted April 24, 2006 have been fully considered, but are not persuasive.

Double Patenting Rejection

Applicants' arguments with respect to the double patenting rejections are unpersuasive. Particularly, applicants improperly read the instruction set forth in M.P.E.P.. The M.P.E.P. states:

One significant difference is that a double patenting rejection must rely on a comparison with *the claims in an issued or to be issued patent*, whereas an obviousness rejection based on the same patent under 35 U.S.C. 102(e)/103(a) relies on a comparison with what is disclosed (whether or not claimed) *in the same issued or to be issued patent*. In a 35 U.S.C. 102(e)/103(a) rejection over a prior art patent, the reference patent is available for all that it fairly discloses to one of ordinary skill in the art, regardless of what is claimed. In re Bowers, 359 F.2d 886, 149 USPQ 570 (CCPA 1966). (emphasis added).

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Clearly, the patent herein referred to the patent with the claims that are obvious to the claims in the application. Lee et al. is cited to support for the state of the art at the time the claimed invention was made, not because the claims in the application is obvious over the claims in Lee.

Rejections under 35 U.S.C. 112, first paragraph.

Applicants' reading of MPEP is incomplete. MPEP states:

The written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice (see i)(A), above), reduction to drawings (see i)(B), above), or by disclosure of relevant, identifying characteristics, i.e., structure or other physical and/or chemical properties, *by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics*, sufficient to show the applicant was in possession of the claimed genus (see i)(C), above). See Eli Lilly, 119 F.3d at 1568, 43 USPQ2d at 1406. (emphasis added).

It is further stated:

A "representative number of species" means that the species which are adequately described are representative of the entire genus. Thus, when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus. >The disclosure of only one species encompassed within a genus adequately describes a claim directed to that genus only if the disclosure "indicates that the patentee has invented species sufficient to constitute the gen[us]." See Enzo Biochem, 323 F.3d at 966, 63 USPQ2d at 1615; Noelle v. Lederman, 355 F.3d 1343, 1350, 69 USPQ2d 1508, 1514 (Fed. Cir. 2004) (Fed. Cir. 2004)("[A] patentee of a biotechnological invention cannot necessarily claim a genus after only describing a limited number of species because there may be unpredictability in the results obtained from species other than those specifically enumerated."). "A patentee will not be deemed to have invented species sufficient to constitute the genus by virtue of having disclosed a single species when ... the evidence indicates ordinary artisans could not predict the operability in the invention of any species other than the one disclosed." In re Curtis, 354 F.3d 1347, 1358, 69 USPQ2d 1274, 1282 (Fed. Cir. 2004)

In the instant case, the general description of tacky polymer is purely functional, lacking any information coupling the functional properties to the chemical structure of the tacky polymer. Applicants provide no way for identifying a tacky polymer other than test and see, suggesting the tacky properties required herein is unpredictable.

Rejections under 35 U.S.C. 103

8. In response to applicant's argument that Miller is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Miller reference is reasonably pertinent to the particular problem with which the applicants were concerns. Particularly, Miller teaches the tacky polymer herein. Miller particularly teaches the polymer with lower Tg have many advantage over higher Tg polymer.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion, and motivation are found both in the references and in the

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knowledge generally available to one of ordinary skill in the art. Particularly, Lee at teach hair composition with a combination of polyesters functionalized with a sulpho group such as Eastman AQ polymers (see pages 3, lines 15-20) and acrylate-based copolymers such as octylacrylamide/acrylates/butylaminoethyl methacrylate copolymer, Miller et al. teaches the improved branched sulfonic polyester with lowed Tg. The low Tg provide advantage that the composition will not be brittle at low temperature, thus maintain its property. As to the particular physical properties of the polymer recited herein, note "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Further, it is well settled that "As long as some motivation or suggestion to combine the references is provided by the prior art taken as whole, the law does not require that the references be combined for the reason contemplated by the inventor." In re Beattie 947 F.2d 1312 (Fed. Cir. 1992).

In response to applicants' arguments that the Tg disclosed in Miller refers to Tg of adhesive, not the Tg for polymer, it is noted that the polymer disclosed by Miller is the polymer herein employed (AQ 1350), note "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable as discussed above.

In response to applicants' arguments that Lee preferred Tg of the polymer be in the range of 50oC to 70 oC, it is noted that disclosed examples and preferred embodiments do not

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constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 1617